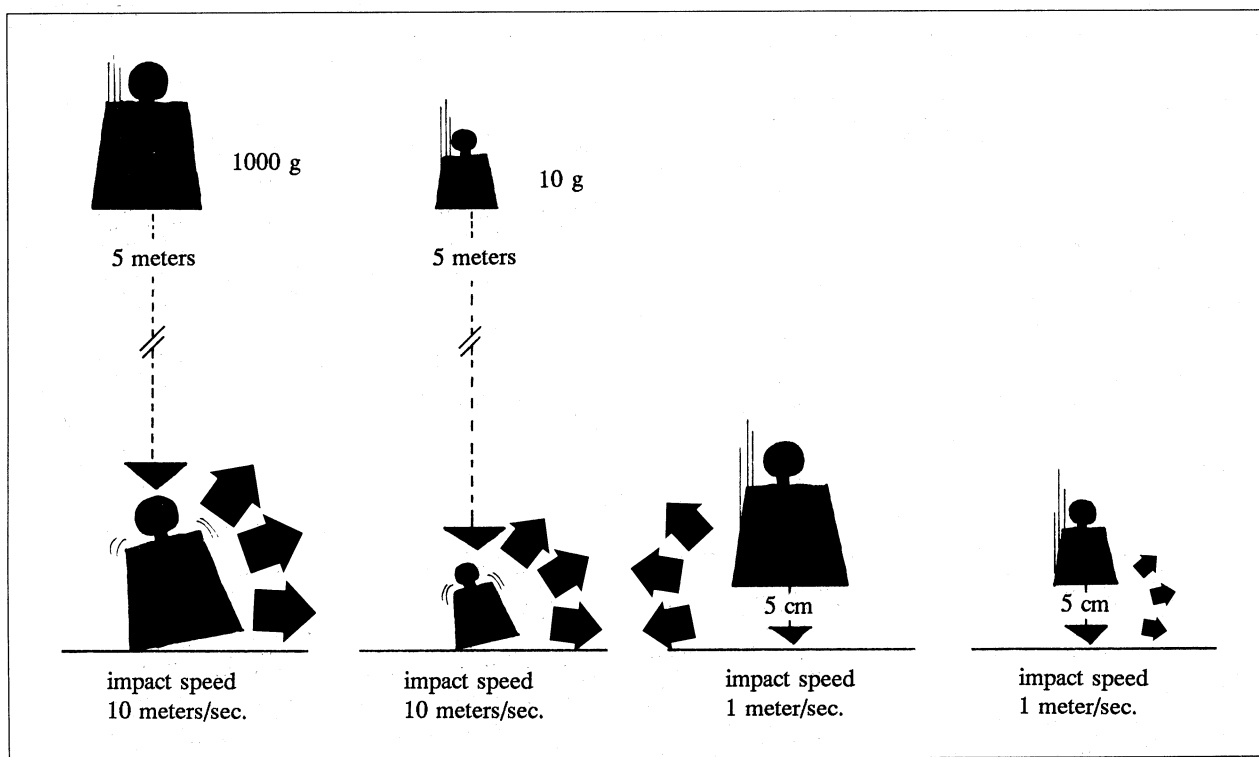


LIGHT OBJECTS AND LOW SPEED PRODUCE THE LEAST IMPACT NOISE

When a plate is struck by an object, the plate vibrates and makes noise. The sound level is determined by the weight of the object and its striking speed. If the drop height of an object is reduced from 5 meters to 5 centimeters, or if the weight is reduced from 1000 g to 10 g, the sound level drops by about 20 dB.

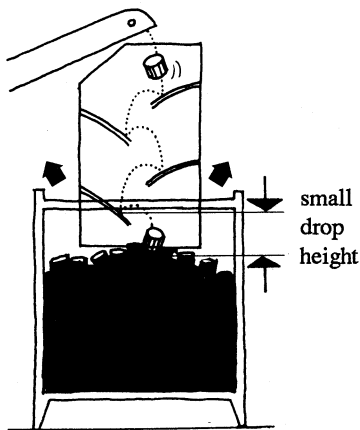
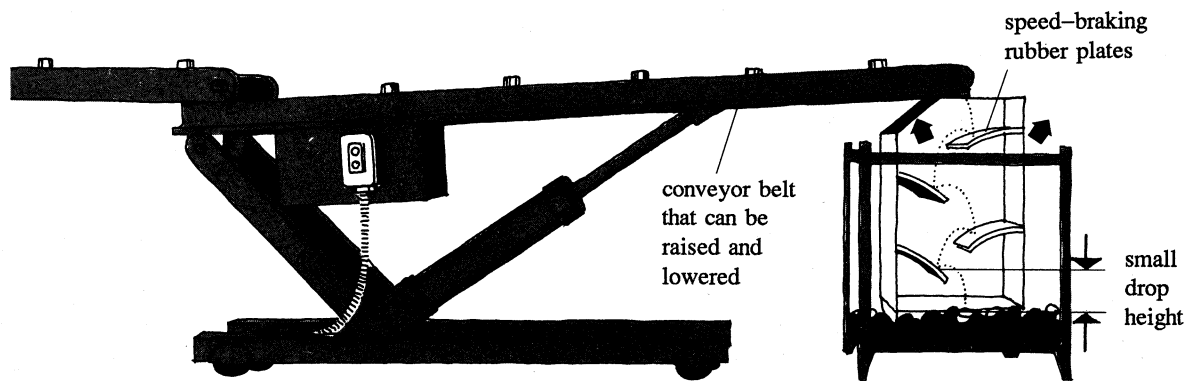
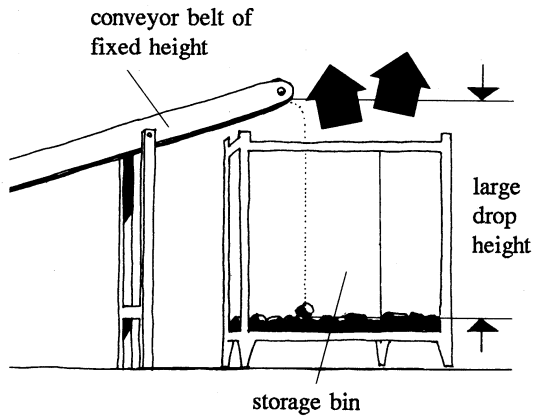
Principle



Application of materials handling

Example

Steel parts are transported from a machine to a storage bin. When the bin is empty, the drop height is large and the noise is loud.



Control Measure

A hydraulic system is installed so that the conveyor belt can be raised and lowered. The belt ends in a drum equipped with rubber plates to break the fall of the parts. The drum is raised automatically